

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 6,927,793 B1
DATED : August 9, 2005
INVENTOR(S) : Seitz et al.

Page 1 of 3

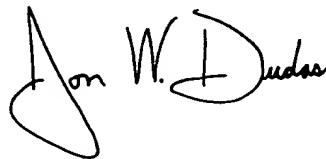
It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Delete Title page, and substitute, new Title page (attached).

Delete drawing sheet 3, and substitute, drawing sheet 3, with the attached sheet .

Signed and Sealed this

Twenty-fourth Day of January, 2006

A handwritten signature in black ink, reading "Jon W. Dudas". The signature is stylized, with a large loop for the "J" and a cursive "Dudas".

JON W. DUDAS
Director of the United States Patent and Trademark Office

(12) **United States Patent**
Seltz et al.

(10) Patent No.: **US 6,927,793 B1**
(45) Date of Patent: **Aug. 9, 2005**

(54) **METHOD AND DEVICE FOR FORMING AN IMAGE**

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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

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(30) Foreign Application Priority Data

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(51) Int. Cl.⁷ H04N 5/235

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(58) Field of Search 348/229.1, 230.1, 348/222.1, 297

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Primary Examiner—Wendy R. Garber

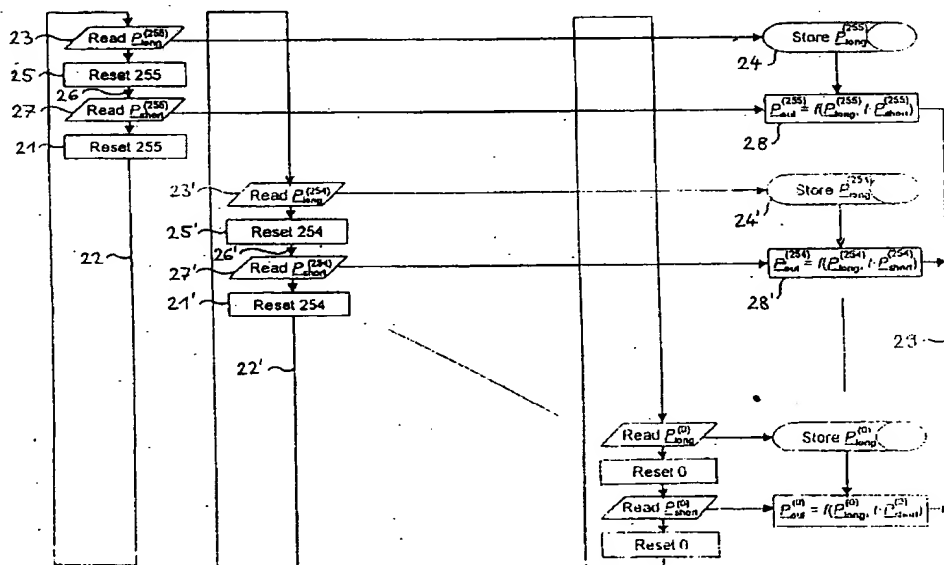
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(57) **ABSTRACT**

The method for forming an image with a wide dynamic range makes use of an image sensor containing subsets of pixels that can be individually reset. After an initial reset (21), a pixel or row of pixels is exposed (22) for a first time interval and the gray value(s) ($P_{\text{long}}^{(255)}$) are read out (23) and stored (24). The pixel or row of pixels is then reset (25) and exposed (26) for a second, shorter time interval. The second gray value(s) ($P_{\text{short}}^{(255)}$) is/are read out (27) and either stored or immediately combined (28) with the first gray value(s) ($P_{\text{long}}^{(255)}$) by means of a merging function (f). The merging function (f) ensures a monotonic, smooth change in output from the lowest to the highest gray values. The procedure is repeated for all pixels or rows of pixels in the image sensor, thus obviating the need for the storage of complete images. The method reduces temporal aliasing to a minimum and eliminates spatial aliasing.

13 Claims, 3 Drawing Sheets



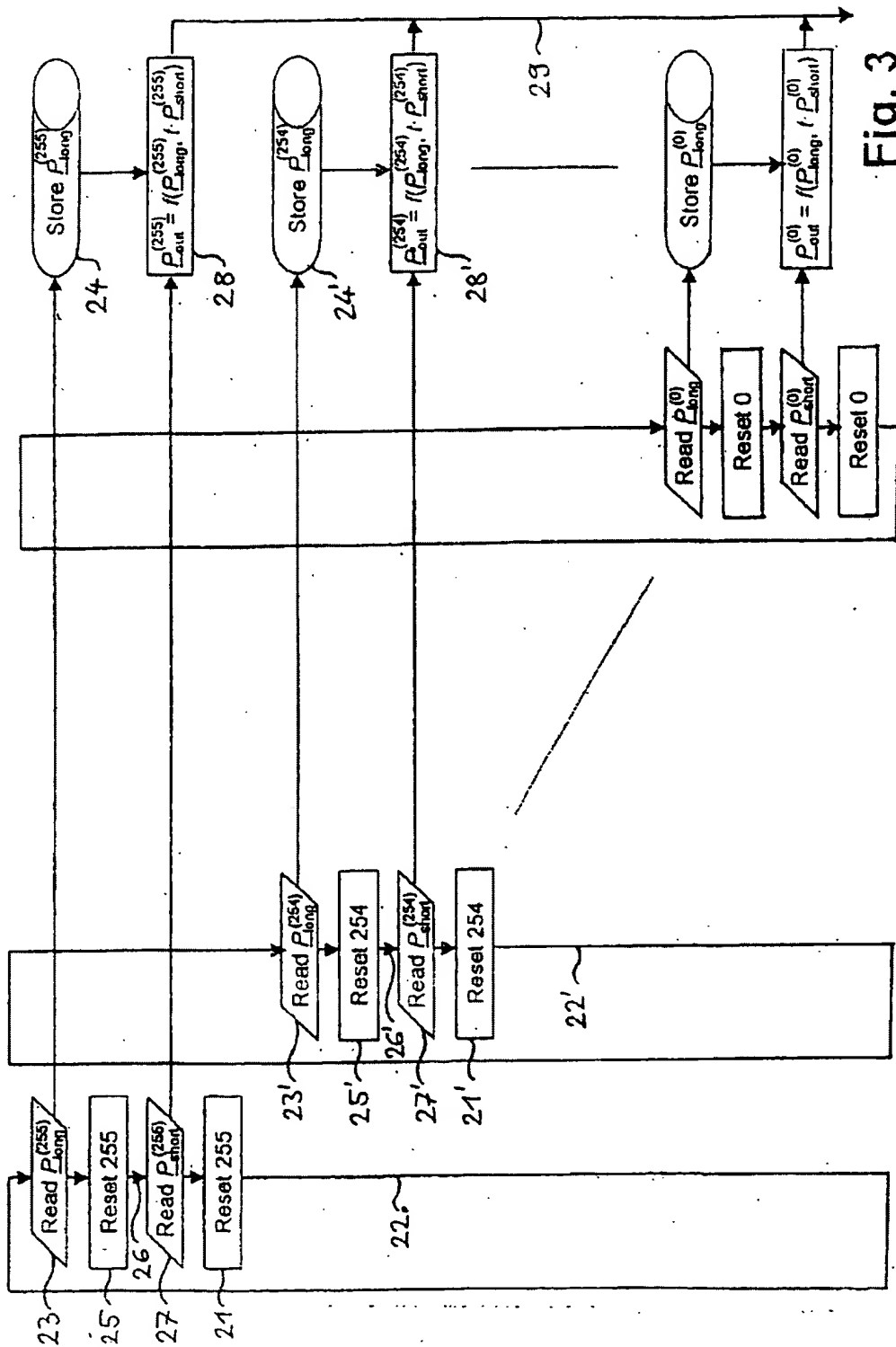


Fig. 3